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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,024	04/12/2004	Mitsuhiro Wada	02309/100H368-US1	3544
7278	7590	03/07/2007		
DARBY & DARBY P.C. P. O. BOX 5257 NEW YORK, NY 10150-5257			EXAMINER HAND, MELANIE JO	
			ART UNIT	PAPER NUMBER
			3761	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/07/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/823,024	<b>Applicant(s)</b> WADA, MITSUHIRO	
	<b>Examiner</b> Melanie J. Hand	<b>Art Unit</b> 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 4 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4, 8-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

Applicant's arguments with respect to claims 4 and 8-10 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soerens et al (U.S. Patent Application Publication No. 2004/0116885).

With respect to **claim 8**: Soerens teaches an absorbent article 10, e.g. a sanitary tampon, comprising: an absorber including an absorbent layer 12 made of an absorbent fibrous material and a hydrophobic liquid-permeable layer (collectively, layers 42,44) covering both surfaces of the absorbent layer 12, said absorbent layer 12 being apertured and thus having a plurality of small open recesses dispersed in both the surfaces of said absorbent layer and extending toward an inner area of said absorbent layer, and said absorber being folded along three fold lines extending in a longitudinal direction of said absorber to have three clefts defined between adjacent folds and then compressed (implicitly described by Soerens' teaching of a tampon) over a substantially entire length into a column shape wherein the three clefts (perpendicular to the three fold lines) open on a column surface in a direction parallel to the longitudinal direction. The small open recesses are formed by aperturing the absorbent layer 12 prior to compression

so that a fiber density of the absorbent layer is increased in a vicinity of the small open recesses, as Soerens teaches that the apertures are created to facilitate folding of layer 12.

(Fig. 2F, ¶¶ 0048,0049,0051,0052,0055,0064)

With respect to **Claim 9**: The absorber is folded into a column shape to have a generally M-shaped cross-section 26, as is seen in Fig. 2F. (¶ 0052)

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soerens et al ('885) in view of Jessup et al (U.S. Patent No. 6,039,716).

With respect to **claim 4**: Soerens does not explicitly teach that the absorbent layer 12 is formed of a fibrous web comprising rayon, or that the hydrophobic liquid permeable layer is formed of a spunbond nonwoven fabric comprising polyethylene terephthalate. Jessup teaches flat absorbent member 12 formed of a fibrous rayon web and a spunbond nonwoven liquid-permeable cover 16. (Figs. 1,3,5) Jessup does not explicitly teach a web comprising polyethylene terephthalate spunbond, however Jessup teaches a polypropylene web, which is substantially similar in its permeability properties to polypropylene. Since the devices taught by Soerens and Jessup seek to solve a similar problem in the art, i.e. provide a tampon with a folded absorbent layer, it would be obvious to one of ordinary skill in the art to modify the device of Soerens by using rayon as the absorbent layer material.

Neither Soerens nor Jessup explicitly teaches a web comprising polyethylene terephthalate (PET) spunbond, however Jessup teaches a polypropylene web, which is substantially similar in its permeability properties to polypropylene. Since polypropylene and PET accomplish an identical result of providing liquid permeability, it would be further obvious to

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modify the device of the combined teaching of Soerens and Jessup by substituting the layers 42,44 with a PET web or add PET fibers to the polypropylene fibers taught by Jessup with a reasonable expectation of success.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soerens ('885) in view of Osborn, III et al (U.S. Patent No. 5,885,265).

With respect to **claim 10**: Soerens does not teach an aperture diameter or density prior to compression. Osborn teaches an interlabial absorbent article 20 with a cylindrical shape ('265, Col. 5, lines 26-28) having a topsheet 28 and backsheet 30 wherein topsheet 28 contains a plurality of apertures 50. Osborn teaches an aperture density of between 9-400/in<sup>2</sup> and an open area percentage of 30-40%. ('265, Col. 36-39, 46-48) Taking these teachings into account, the range for aperture diameter is 0.54-3.5 mm. Osborn is silent regarding the specific motivation for teaching aperture densities in said range, however Osborn teaches that article 20 is water-dispersable and flushable, and a higher density of apertures would hasten absorption and breakdown of the article in water and thus have a similar effect in terms of absorbing exudates more rapidly and transferring said exudates to absorbent core 32, therefore it would be obvious to one of ordinary skill in the art to modify the liquid-permeable apertured film cover 16 taught by Soerens so as to have an aperture diameter and density in the range taught by Osborn, which overlaps the relevant ranges set forth in claim 10.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand  
Examiner  
Art Unit 3761

March 1, 2007

A handwritten signature in black ink, appearing to read 'Melanie J Hand', with a long, sweeping horizontal line extending to the right.